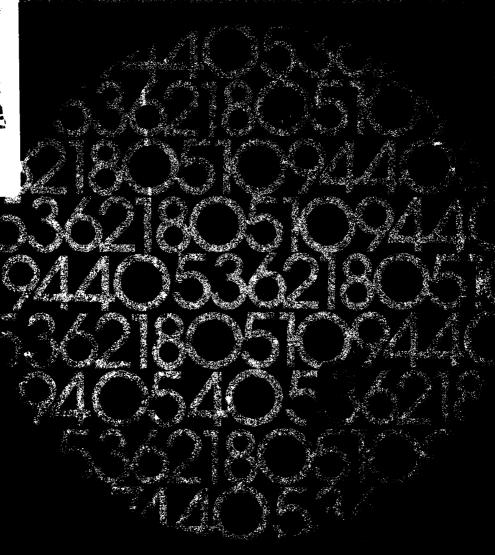
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FIVE-YEAR BUDGET PROJECTIONS:
FISCAL YEARS 1981-1985 •

A Report to the Senate and House Committees on the Budget, Part II.

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# NOTES

Unless otherwise indicated, all years referred to are fiscal years.

Details in the text, tables, and figures of this report may not add to totals because of rounding.

The Congressional Budget Office is required by Section 202(f) of the Congressional Budget Act of 1974 to submit an annual report on budgetary options. This year the report is in two parts: Entering the 1980s: Fiscal Policy Choices and Five Year Budget Projections: Fiscal Years 1981-1985.

Part II, Five Year Budget Projections: Fiscal Years 1981-1985, presents budget projections that are intended to provide a baseline for the consideration of multiyear budget options in the First Concurrent Resolution on the Budget for Fiscal Year 1981. The report also includes estimates of the effects of changes in economic assumptions on the budget outlook.

The budget projections in this report are based on Congressional action through the end of the first session of the 96th Congress. They do not include initiatives recently proposed by the President or anticipated, but not yet enacted, in the Second Concurrent Resolution on the Budget for Fiscal Year 1980. A discussion of the budget implications for 1982-1985 of the President's budget can be found in Chapter V of the Analysis of the President's Budgetary Proposals for Fiscal Year 1981.

The Congressional Budget Office (CBO) is required under Section 308(c) of the Congressional Budget Act to project new budget authority, outlays, and revenues for each fiscal year between 1981 and 1985. The budget projections in this report fulfill that requirement. The act also requires CBO to project tax expenditures for each of the next five fiscal years. A separate report on tax expenditure projections will be issued at a later date.

In keeping with CBO's mandate to provide objective analysis, the report contains no recommendations. The report was prepared by staff of the CBO Budget Analysis Division, with the assistance of the Fiscal Analysis and Tax Analysis Divisions. Francis S. Pierce and Robert L. Faherty edited the manuscript, and Paula Spitzig coordinated its preparation for publication and typed the many drafts.

Alice M. Rivlin Director

February 1980

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#### SUMMARY

This report projects the size and shape of the federal budget over the next five years if laws in effect at the end of the first session of the 96th Congress remain unchanged. The projections are not a forecast of future budgets, since changes will undoubtedly be made in current taxing and spending laws throughout the five-year period and the economy may not perform as assumed. The budget projections in this report are meant to provide a useful baseline for the consideration of multiyear budget alternatives in the First Concurrent Resolution on the Budget for Fiscal Year 1981. The projections demonstrate several important characteristics of the extension of current laws:

- o Inflation would cause unprecedented growth in revenues over the five-year period, as taxpayers moved into higher income tax brackets. In the absence of tax cuts, revenues would grow to almost 24 percent of GNP by 1985.
- o Federal outlays would decline to about 17 percent of the gross national product (GNP) by 1985--the lowest percentage since 1956. This would result primarily from the fact that a large part of federal spending does not increase automatically with inflation.
- o If discretionary adjustments are assumed to be made in revenues and spending to compensate for inflation, this brings the budget projections much closer to historical experience. Even then, however, federal outlays would decline to 19.9 percent of GNP by 1985, while revenues would remain at about 21 percent of GNP.
- o Changes in the economy can automatically lead to dramatic changes in the outlook for revenues, spending, and the deficit. A deeper recession in calendar year 1980 that results in a one-percentage-point increase in the forecasted unemployment rate could reduce projected revenues for fiscal year 1981 by over \$20 billion and increase outlays by more than \$5 billion. Stronger economic growth could increase projected revenues and reduce outlays.

## **ECONOMIC ASSUMPTIONS**

The budget projections in this report are based on the Congressional Budget Office (CBO) economic forecast of growth in real GNP of -2.3 to

-0.3 percent in calendar year 1980 and 2.0 to 4.0 percent in 1981. Under these assumptions, the unemployment rate would peak at between 7.5 and 8.5 percent in 1981. For 1982-1985, the economy is assumed to grow at a steady rate of 3.8 percent, with the unemployment rate returning to its current level of about 6 percent. The inflation forecast calls for a rise in the consumer price index (CPI) of 8.6 to 10.6 percent in calendar year 1980 and 8.3 to 10.3 percent in 1981. For 1982-1985, inflation is assumed to average between 8 and 9 percent.

## FEDERAL REVENUES

On the basis of Congressional action through the end of the first session of the 96th Congress, fiscal year 1980 revenues are estimated to be \$516 billion--\$2 billion below the budget resolution floor. (The estimate does not include the effects of the proposed windfall profits tax.) If current laws are extended, revenues would grow to \$582 billion, or 21 percent of GNP in 1981--the highest percentage since World War II. By fiscal year 1985, revenues would be a record 24 percent of GNP.

In the past, the Congress has enacted discretionary tax cuts that have prevented taxes from rising as fast as projected under current laws. In particular, income tax cuts have offset the tendency of the progressive tax structure to take a larger and larger fraction of income as inflation moves people into higher income brackets. Discretionary tax cuts to offset the effects of inflation on individual income taxes would lower projected revenues in 1981 by \$10 billion; the reduction would grow to \$118 billion by fiscal year 1985 (see Summary Table 1).

All revenue estimates are subject to uncertainty. Fortunately, many of the errors offset one another, so that the effects on the totals are not often significant. For 1980, current law revenues could turn out to be at least \$3 billion higher or lower, depending on such factors as individual income tax withholding and corporate tax catch-up payments. The uncertainty band widens in 1981-1985, since errors could conceivably be compounded.

#### FEDERAL SPENDING

For fiscal year 1980, outlays are estimated at \$560 billion--more than \$12 billion above the second budget resolution ceiling. The 1980 estimate represents an unusually large increase of 13.5 percent over 1979. The large growth is the result of double-digit inflation, higher interest rates, and a projected rise in the unemployment rate. All of these factors automatically trigger spending increases.

SUMMARY TABLE 1. CURRENT LAW REVENUES AND DISCRETIONARY INFLATION OFFSET: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1980	1981	1982	1983	1984	1985
Current Law Revenues	516	582	678	781	905	1,053
Percent of GNP	20.6	21.0	21.8	22.3	23.0	23.9
Discretionary Inflation Offset		-10	-24	-49	-80	-118
Revenues with Inflation Offset	516	<i>5</i> 72	654	732	825	935
Percent of GNP	20.6	20.7	21.0	20.9	21.0	21.2
Range of Uncertainty	<u>+</u> 3	<u>+</u> 5	<u>+</u> 10	±15	<u>+</u> 20	<u>+</u> 25

The 1980 base used to project federal spending includes Congressional action through the end of the first session of the 96th Congress plus anticipated supplemental appropriations for certain entitlement programs, such as Medicaid, the food stamp program, and the 7 percent federal pay increase that became effective on October 1, 1979. The 1980 base does not include the various spending reductions and program supplementals assumed in the second resolution—such as those for energy and targetted fiscal assistance—that were not enacted in the first session. The discretionary supplementals and spending reductions assumed in the resolution, however, would not alter the outlay totals, since the changes offset one another.

A current law extension of fiscal year 1980 programs into 1981-1985 would lead to negative rates of real increase in outlays since, under current law, less than half of the budget is automatically adjusted for inflation. Outlays would drop to 17 percent of GNP, with all spending categories except benefit payments for individuals declining in real terms. Real growth in benefit payments would continue because most of these programs are automatically adjusted for inflation under current law, and the population served by these entitlement programs will continue to grow.

A more realistic projection of outlays, and perhaps a preferable starting point for consideration of budget options, can be obtained by assuming that all federal programs are adjusted to keep pace with inflation. In practice, national defense, grants to state and local governments, and many other federal programs tend to be adjusted by the Congress on a discretionary basis to keep up with rising costs (see Summary Table 2).

SUMMARY TABLE 2. CURRENT LAW OUTLAYS AND DISCRETIONARY INFLATION INCREMENT: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1980	1981	1982	1983	1984	1985
Current Law Outlays	560	603	648	685	722	763
Percent of GNP	22.3	21.8	20.8	19.5	18.3	17.3
Discretionary Inflation Increment		16	38	62	85	112
Outlays with Inflation Increment	560	619	686	747	807	875
Percent of GNP	22.3	22.4	22.0	21.3	20.5	19.9
Range of Uncertainty	<u>+</u> 3	<u>+</u> 5	<u>+</u> 10	<u>+</u> 15	<u>+</u> 20	<u>+</u> 25

Inflation is an important factor in the projected growth of outlays in current dollars. Automatic inflation adjustments that are scheduled to become effective after January 1, 1980, will cost \$8 billion in fiscal year 1980 and \$34 billion in 1981. Under current laws, the total cost will have grown to \$138 billion by fiscal year 1985. Over \$80 billion of this cost is for Social Security and related programs (see Summary Table 3). The discretionary inflation adjustments, which start in fiscal year 1981, would add over \$112 billion to spending by 1985 and are divided almost equally between defense and nondefense programs. Over \$30 billion of this amount would be for federal pay increases.

# SENSITIVITY OF THE BUDGET TO CHANGES IN THE CBO ECONOMIC ASSUMPTIONS

Changes in the economy--especially the unemployment rate--can dramatically affect the budget totals.

SUMMARY TABLE 3. PROJECTED COSTS OF AUTOMATIC INFLATION ADJUSTMENTS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1980	1981	1982	1983	1984	1985
Social Security and Related Programs	4	20	35	51	66	84
Federal Employee Retirement	1	3	6	9	12	15
Medicare/Medicaid	2	6	9	14	19	24
Unemployment Compensation	1	2	3	4	5	6
Other		3	5	7	8	9
Total	8	34	58	85	110	138

- o A one percentage point higher unemployment rate in calendar year 1980--caused by lower economic growth than in the CBO forecast--is estimated to reduce current law revenues for fiscal year 1981 by \$20 to \$22 billion and to increase spending for unemployment-related programs by \$5 to \$7 billion. The effects on the deficit would reinforce each other, causing an increase of \$25 to \$29 billion (see Summary Table 4). A one percentage point lower unemployment rate would result in a revenue gain and an outlay reduction. The revenue gain would be considerably less than \$20 billion if the lower unemployment rate were associated with declining productivity rather than greater real economic growth.
- o A one percentage point higher inflation rate for calendar year 1980, with no change from the CBO forecast for 1981, could cause revenues to be \$5 to \$7 billion higher in fiscal year 1981. The effect of this increase on the deficit, however, would be offset somewhat by a \$1 to \$2 billion increase in outlays for indexed benefit programs. The effect of inflation on current law outlays would be larger by fiscal year 1982--\$2 to \$5 billion-- because of the lags built into the indexing provisions for many federal benefit programs.

SUMMARY TABLE 4. POTENTIAL CHANGES IN 1981 CURRENT LAW REVENUES, OUTLAYS, AND THE DEFICIT CAUSED BY CHANGES IN THE ECONOMY: IN BILLIONS OF DOLLARS

	Change in Revenues	Change in Outlays	Change in Deficit
One Percentage Point Higher Unemployment Rate <u>a</u> /	-20 to -22	+5 to +7	-25 to -29
One Percentage Point Higher Inflation Rate	+5 to +7	+1 to +2	+3 to +6
One Percentage Point Higher Interest Rates	0 to +2	+1 to +3	+1 to -3

a/ A one percentage point lower unemployment rate would reduce revenues by slightly more than \$7 billion. Revenues could be increased by much less than \$20 billion if the lower unemployment rate is associated with declining labor productivity rather than greater real economic growth.

#### THE BUDGET DEFICIT

If current laws are continued with no discretionary adjustments for the effects of inflation, the budget deficit would decline from over \$40 billion in fiscal year 1980 to about \$20 billion in 1981. As demonstrated above, these estimates are subject to considerable uncertainty because of possible changes in the economic outlook. Uncertainties in the current law revenue and expenditure estimates, stemming from the economy, spending rates, income tax withholding rates, and possible administrative actions, result in a \$10 billion range for 1980 and a \$20 billion range for 1981 (see Summary Table 5).

o Finally, a one percentage point higher interest rate in calendar year 1980 would lead to \$1 to \$3 billion more outlays for interest on the public debt in fiscal year 1981 and could result in somewhat more revenues from taxes on interest income.

SUMMARY TABLE 5. THE PROJECTED BUDGET DEFICIT (-) OR SURPLUS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1980	1981	1982	1983	1984	1985
Deficit (-) or Surplus	-44	-21	-20 <u>a</u> /	<u>a</u> /	<u>a</u> /	5 <u>a</u> /
Range of Uncertainty	<u>+</u> 5	<u>+</u> 10	<u>+</u> 20	<u>+</u> 30	<u>+</u> 40	<u>+</u> 50

a/ Includes fiscal policy changes--that is, tax cuts and spending increases--that could be needed to sustain economic growth in 1982-1985.

For fiscal years 1982-1985, under an extension of current law, the federal government would be taking more out of the economy in tax receipts than it would be putting back in the form of wages, transfer payments, and purchases. The fiscal drag on the economy would make the assumed economic growth of 3.8 percent a year unlikely. Consequently, it is not correct to construe the budget margin (the difference between current law revenues and outlays in 1982-1985) as a projection of a budget surplus that is consistent with the economic assumptions. In all likelihood, fiscal policy changes that would use up most of the budget margin would be required if the economic growth path were to be achieved.

The projection of a \$20 billion deficit in 1982 and budget balance in 1983-1985 includes the effects of fiscal policy changes—that is, tax cuts or spending increases—that could be required to keep the economy on the assumed growth path. The range of uncertainty grows in fiscal years 1982-1985. Estimating is one factor in the range. Two other important sources of uncertainty exist, however. First, if policymakers maintain a fixed target for economic growth and use fiscal policy to achieve the target, variations in the strength of nonfederal demand can lead to wide swings in the fiscal policy changes required and the resulting deficits. Second, if the strength of nonfederal demand is significantly different than assumed in this report, policymakers may choose not to use fiscal policy to achieve a fixed economic growth target. They may either alter their targets or attempt to use means other than fiscal policy to stimulate growth.

This report is a study of the size and shape of future federal budgets if taxing and spending laws in effect at the end of the first session of the 96th Congress were to remain unchanged. It is not a forecast, since actual budgets will reflect changes in spending and tax policies not yet knowable, as well as unforeseen developments in the economy. Rather, the projections are meant as a starting point in the formulation of multiyear budget targets in the First Concurrent Resolution on the Budget for Fiscal Year 1981. They endeavor to show what would happen to the federal budget in fiscal years 1981-1985 if no new tax cuts or tax increases were passed and if no discretionary changes in federal spending were enacted. Several principal conclusions emerge:

- o Under current law, inflation would cause unprecedented growth in revenues over the five-year period, as taxpayers move into higher income tax brackets. In the absence of tax cuts, revenues would grow to almost 24 percent of GNP by 1985.
- o Current law outlays would decline to about 17 percent of the gross national product (GNP) by 1985—the lowest percentage since 1956. This results from the fact that a large part of federal spending does not increase automatically with inflation.
- o Discretionary inflation adjustments to revenues and spending would result in budget projections much closer to historical experience. Even then, however, federal outlays would decline to 19.9 percent of GNP by 1985, while revenues would remain at about 21 percent of GNP.
- o Changes in the economy can automatically lead to dramatic changes in the outlook for revenues, spending, and the deficit. A deeper recession in calendar year 1980 that results in a one-percentage-point increase in the forecasted unemployment rate could reduce projected revenues for fiscal year 1981 by over \$20 billion and increase outlays by more than \$5 billion. Stronger economic growth could increase projected revenues and reduce outlays.

## ECONOMIC ASSUMPTIONS UNDERLYING THE PROJECTIONS

Budget projections of the kind described depend on certain assumptions about economic trends over the next several years. On the tax side of the budget, for example, continuing inflation will increase the revenues from income taxes while higher unemployment will decrease the revenues. On the expenditure side, inflation and higher unemployment may lead to increases in federal outlays, especially for Social Security benefits and unemployment compensation.

The Congressional Budget Office (CBO) has forecast the likely state of the economy in calendar years 1980 and 1981 if federal spending and tax policies remain unchanged from current law and if the Federal Reserve Board maintains its current long-term targets. Growth in real GNP is expected to be negative during 1980, ranging from -2.3 to -0.3 percent between the fourth quarter of 1979 and the fourth quarter of 1980. The projected drop in real GNP is smaller than the average postwar recession, with the decline concentrated in the first half of 1980. In 1981, real economic growth is expected to recover moderately, rising in the 2 to 4 percent range (see Table 1). The projected recovery, which begins near the end of 1980, is quite weak by historical standards.

Unemployment is expected to rise from current levels to the 7.2 to 8.2 percent range by the end of 1980 and to hold at high rates throughout 1981. The rise in the consumer price index (CPI) is expected to moderate somewhat from current levels, to a range of 8.6 to 10.6 percent from the fourth quarter of 1979 to the fourth quarter of 1980, and to an 8.3 to 10.3 percent range during 1981. Interest rates are expected to moderate as well, with an average rate on 91-day Treasury bills of about 9 percent in 1981--down from the 10-plus rates in 1979. The various factors that enter into the CBO forecast and the sources of greatest uncertainty have been discussed in detail in the companion volume to this report. 1/

The short-run forecast should be distinguished conceptually from the assumptions for 1982-1985. All short-run forecasts are subject to a great deal of uncertainty. The range of uncertainty is even greater for economic forecasts more than two years into the future. Consequently, no attempt was made to forecast economic conditions for 1982-1985. Rather, the economy was assumed to expand at a steady rate of 3.8 percent, so that by 1985 the unemployment rate would return to approximately the current level. In contrast to the short-run forecast, the long-range assumptions

Congressional Budget Office, Entering the 1980s: Fiscal Policy Choices (January 1980).

TABLE 1. AGGREGATE ECONOMIC ASSUMPTIONS: BY CALENDAR YEAR

	Actuals		Forecast <u>a</u> /		Long-Range Assumptions			
	1978	1979	1980	1981	1982	1983	1984	1985
Gross National Product (GNP)								
Current dollar GNP (in billions of dollars)	2,128	2,369	2,555	2,849	3,210	3,611	4,050	4,529
Real GNP (in billions of 1972 dollars)	1,399	1,431	1,418	1,446	1,495	1,552	1,611	1,672
Growth rate of real GNP (percent)								
Year to year	4.4	2.3	-0.9	2.0	3.4	3.8	3.8	3.8
Fourth quarter to fourth quarter	4.8	0.8	-1.3	2.9	3.8	3.8	3.8	3.8
Unemployment Rate (percent)								
Yearly average	6.0	5.8	7.0	8.0	7.7	7.1	6.4	6.0
Fourth quarter	5.8	5.9	7.7	8.0	7.5	6.8	6.2	5.9
Consumer Price Index (percent change)								
Year to year	7.7	11.3	11.3	8.9	9.2	8.4	8.0	7.7
Fourth quarter to fourth quarter	9.0	12.7	9.5	9.3	8.8	8.2	7.9	7.6
Interest Rate (91-day Treasury bills, percent)								
Yearly average	7.2	10.1	10.1	8.9	8.7	8.0	7.7	7.5
Fourth quarter	8.6	11.8	8.6	9.1	8.4	7.8	7.6	7.5

a/ Estimates are approximate midpoints of the ranges given in the economic forecast in Congressional Budget Office, Entering the 1980s: Fiscal Policy Choices (January 1980). The dollar figures for GNP represent annual averages.

contain no cyclical variations. Clearly, such variations could result in a 1985 unemployment rate that is higher or lower than assumed in this report.

The assumption of a 3.8 percent rate of real growth for 1982-1985 is slightly higher than the postwar average. Extended periods of above-average economic expansion, however, are not unprecedented. In 1962 to 1965, for instance, the economy grew at an average of greater than 5 percent annually.

The relationships between economic growth, inflation, and unemployment in the long-range economic projections in Table 1 are based on several critical assumptions, including the following two:

- o Potential GNP grows at an annual rate of 3 percent.
- o The civilian labor force grows at an annual rate of about 1.8 percent.

The remainder of this chapter includes a summary of the budget projections for fiscal years 1981-1985. The effects of alternative economic assumptions are discussed briefly, as well as the uncertainty in the outlook for the budget deficit. The second chapter presents the revenue projections and indicates the major sources of revenue growth under current laws. The projections for spending are placed in an historical context in Chapter III, where the major factors that have affected federal spending over the past 30 years are reviewed. These same factors dominate spending over the next five years under current law.

# CURRENT LAW PROJECTIONS OF REVENUES AND EXPENDITURES

On the basis of the economic assumptions presented, CBO has projected revenues and outlays for a budget based on current law--that is, assuming no new legislated tax cuts or tax increases and no discretionary changes in outlays. In fiscal year 1980, revenues for such a budget would be \$516 billion and outlays would be \$560 billion. 2/ The resulting budget deficit of \$44 billion is \$14 billion greater than the deficit assumed in November 1979, when the Congress passed the second concurrent budget resolution. This difference occurs largely because outlays are expected to be significantly higher than those assumed by the resolution conferees as the result of higher interest rates, higher inflation, and the effects of the grain embargo on federal price support payments.

## Revenues in 1981-1985

Revenues of a current law budget would grow to 21.0 percent of GNP in fiscal year 1981. This would be the highest percentage since World War II. In 1982-1985, the rate of growth in revenues would exceed the rate of GNP growth in every year so that, by fiscal year 1985, revenues would be nearly 24 percent of GNP (see Table 2).

Two factors in particular are responsible for the projected rapid growth in revenues:

o The combination of inflation and the progressive individual income tax, which takes a larger fraction of income as people move into higher tax brackets. The average rate on taxable personal income would increase from 14 percent in 1980 to 18 percent in 1985.

<sup>2/</sup> The revenue estimate does not include a windfall profits tax. Enactment of the tax would increase revenues by \$2 to \$5 billion in 1980.

TABLE 2. FIVE-YEAR PROJECTIONS OF CURRENT LAW REVENUES: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1979 Actual B	1980 Estimate	Projections					
			1981	1982	1983	1984	1985	
Current Law Revenues	465.9	516	582	678	781	905	1,053	
Percent of GNP	20.1	20.6	21.0	21.8	22.3	23.0	23.9	
Range of Uncertainty		<u>+</u> 3	<u>+</u> 5	<u>+</u> 10	<u>+</u> 15	<u>+</u> 20	<u>+</u> 25	

o The scheduled Social Security tax increases approved in the Social Security Amendments of 1977 (Public Law 95-216).

#### Outlays in 1981-1985

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The 1980 base used to project federal spending includes Congressional action through the end of the first session of the 96th Congress plus anticipated supplemental appropriations for certain entitlements such as Medicaid and for the 7 percent federal pay raise that became effective on October 1, 1979. The base also includes a supplemental for the food stamp program, on the assumption that the Congress will lift the authorization ceiling. No further discretionary supplementals are assumed. Spending reductions assumed in the 1980 second resolution but not enacted, such as hospital cost containment, have been omitted from the outlay totals. Discretionary supplementals and savings assumed in the resolution would not alter the 1980 outlay totals, however, since the changes are offsetting.

At \$560 billion in 1980, federal spending would exceed 22 percent of GNP. An extension of current laws, including only automatic cost-of-living adjustments and no discretionary inflation adjustments nor federal pay raises, would result in 1981 federal outlays of about \$603 billion-21.8 percent of GNP. In the subsequent years, however, outlays would decline to 17.3 percent of GNP (see Table 3).

These changes in outlays have different causes:

o The rapid growth in outlays in 1980 is concentrated in interest on the public debt (where higher interest rates have increased costs

TABLE 3. FIVE-YEAR PROJECTIONS OF CURRENT LAW OUTLAYS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1979	1980 Estimate	Projections				
	Actual		1981	1982	1983	1984	1985
Current Law Outlays	493.7	560	603	648	685	722	763
Percent of GNP	21.3	22.3	21.8	20.8	19.5	18.3	17.3
Range of Uncertainty		<u>+</u> 3	<u>+</u> 5	<u>+</u> 10	<u>+</u> 15	<u>+</u> 20	<u>+</u> 25

of financing the debt), entitlements indexed to inflation, and unemployment compensation.

o The 1981-1985 decrease in spending as a percent of GNP occurs because federal outlays (under a projection of current law) would not grow in real terms, while the economy has been assumed to expand at an annual rate of greater than 3 percent. 3/ The projection of 17.3 percent in 1985 would be the lowest level since 1956.

#### Uncertainty in the Estimates

All budget projections are subject to estimating uncertainty, stemming from the economy, spending rates, income tax withholding rates, and administrative actions. Fortunately, many of the estimating errors offset one another, so that the effects on the totals are often not significant.

For the 1980 estimates, actual revenues and outlays could each conceivably turn out to be \$3 billion higher or lower, depending on a number

<sup>3/</sup> While it is true that some entitlements, like Social Security and Medicare, grow in real terms under current law assumptions, this growth is largely offset by real decline in other entitlements, such as unemployment compensation, and by the fact that discretionary inflation adjustments are not included in the current law projections.

of factors including spending rates for defense procurement, farm crops and prices, financial transactions between on- and off-budget entities, and individual income tax withholding. The uncertainty band widens in 1981 to \$5 billion higher or lower than the projection, since errors for 1980 could conceivably be compounded in 1981.

For 1982-1985, no clear evidence exists as to the appropriate range of uncertainty for the budget estimates. The growth in the range reflects the potential for compounding errors.

# A CURRENT LAW PROJECTION WITH DISCRETIONARY INFLATION ADJUSTMENTS

The foregoing estimates show that, if current laws were left unchanged, revenues would rise faster than the inflation rate. For example, the individual income tax would take a larger and larger share of personal income as inflation-related wage increases propelled taxpayers into higher tax brackets. Extension of current laws for spending, however, would mean real decline for many government programs in which there are no automatic adjustments for inflation--especially for national defense, most grants to state and local governments, and nondefense federal purchases. Federal pay scales would remain unchanged.

This simple current law forecast does not allow for basic political realities. In the past, the Congress has generally voted discretionary tax cuts and spending increases that have prevented revenues from rising as fast as in a current law projection and have permitted some real spending growth. In order to make allowance for possible legislative responses to inflation, CBO has adjusted its estimates to provide an alternative to the simple current law projection. In the adjusted projection, tax cuts would counteract the disproportionate response of individual income taxes to inflation, 4/ and spending increases for discretionary programs would reflect the rising costs of materials and personnel. 5/

<sup>4/</sup> Certain parts of the corporate income tax structure also do not respond proportionally to inflation. There is, however, no agreed-upon method of indexing the corporate income tax to inflation. Consequently, only individual income taxes are adjusted in the alternative projection.

These inflation adjustments to revenues and spending could be expected to have some economic impact. The CBO economic forecast for 1980 and 1981 assumes no tax cuts or spending increases other than those mandated by current law. A change in the forecast as a result of the 1981 discretionary inflation adjustments would itself result in some (Continued)

Using fiscal year 1980 as a starting point, the tax cut required to offset the disproportionate growth in individual income taxes would be about \$10 billion in 1981. This inflation adjustment for revenues would grow to \$118 billion by fiscal year 1985 (see Table 4). Consequently, revenues would remain near 21 percent of GNP throughout the five-year period instead of growing steadily to over 23 percent, as would be the case under current law.

TABLE 4. CURRENT LAW REVENUES WITH DISCRETIONARY INFLATION OFFSET: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1981	1982	1983	1984	1985
Current Law Revenues	582	678	781	905	1,053
Discretionary Inflation Offset	-10	-24	-49	-80	-118
Revenues with Inflation Offset	572	654	732	825	935
Percent of GNP	20.7	21.0	20.9	21.0	21.2
Percent of GNP	20.7	21.0	20.9	21.0	

Over 40 percent of federal spending responds automatically to inflation under current law. For another 15 percent, inflation is not a factor or is related only in an indirect way. Inflation adjustments that would hold the remainder of federal spending constant in real terms would cost \$16 billion in 1981. By fiscal year 1985, projected spending would be \$112 billion higher than under current law. (In previous CBO five-year

<sup>5/ (</sup>Continued)

further changes in the budget projection for 1980 and 1981. These secondary effects have not been included in this analysis. On the other hand, tax cuts and spending increases in 1982-1985 may be consistent with the long-range economic assumptions. Unlike the 1980-1981 forecast, the outyear economic assumptions do not contain explicit fiscal policy assumptions. Unless nonfederal—that is, private and state and local government—demand is exceptionally strong, tax cuts or spending increases will probably be needed in 1982-1985 if the economic growth assumptions are to be fulfilled.

projections reports, a current law projection of outlays with discretionary inflation adjustments has been called "current policy.") Even with discretionary inflation adjustments, federal outlays would decline to 19.9 percent of GNP by fiscal year 1985 (see Table 5). The reason for this result is that a current law trend, even when all programs are adjusted for inflation, would represent a departure from the trend of the past. With the exception of net interest and nondefense federal purchases, federal spending has grown in real terms since 1950, primarily because of new and expanded programs—a factor not present in a current law projection, even with discretionary inflation adjustments.

TABLE 5. CURRENT LAW OUTLAYS WITH DISCRETIONARY INFLATION INCREMENT: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

1981	1982	1983	1984	1985
603	648	685	722	763
16	38	62	85	112
619	686	747	807	875
22.4	22.0	21.3	20.5	19.9
	603 16 619	603 648 16 38 619 686	603 648 685 16 38 62 619 686 747	603 648 685 722 16 38 62 85 619 686 747 807

# SENSITIVITY OF THE BUDGET TO ECONOMIC ASSUMPTIONS

A question frequently asked is how sensitive the budget projections are to the economic assumptions underlying them. The purpose of this section is to offer a general answer to that question. Further detail will be provided in Chapters II and III.

To estimate the effects of a change in the economic assumptions is a complex task. Much depends on the timing of the economic change. For example, if higher unemployment or inflation is concentrated in the last quarter of the fiscal year, the budget effects will be lagged more than if the changes occur early in the year. This can make a difference of billions of dollars in a given fiscal year. Much also depends on the character of the change. For example, lower unemployment could be associated with either

lower labor productivity or higher economic growth. In the first case, more workers would be employed in producing a given level of output. The effect on nominal incomes and, consequently, on revenues would be small. On the other hand, a reduction in the unemployment rate caused by more economic growth would mean higher nominal incomes and more revenues.

In general, a one-percentage-point change in the unemployment rate that is caused by a change in real economic growth can have a much greater effect on the budget than a one-percentage-point change in the inflation rate or in interest rates (see Table 6):

- o A one percentage point higher unemployment rate in calendar year 1980 caused by lower economic growth than in the CBO forecast would lower current law revenues by \$20 to \$22 billion in fiscal year 1981, and would increase fiscal year 1981 current law spending for unemployment-related programs by \$5 to \$7 billion. 6/
- o A one percentage point higher inflation rate than forecast by CBO for calendar year 1980 would cause current law revenues to be \$5 to \$7 billion higher in fiscal year 1981, especially if the additional inflation was widespread throughout all major sectors of the economy. 7/ Outlays for automatically indexed programs would be slightly higher in fiscal year 1981 by \$1 to \$2 billion.
- A one percentage point change in interest rates in calendar year 1980 would change current law outlays for interest on the public debt by \$1 to \$3 billion in fiscal year 1981, and could also change somewhat revenues obtained from taxes on interest income. Higher interest rates could also result in higher inflation, in which

<sup>6/</sup> The estimates assume lower economic growth and higher unemployment in calendar year 1980. For calendar year 1981, it was assumed that economic growth is the same as in the CBO forecast, but that the unemployment rate remains higher than in the forecast.

<sup>7/</sup> The effects of inflation caused by an unexpected rise in imported oil prices could be somewhat different. This possibility is discussed further in Chapter II. For this analysis, the additional inflation was assumed to be widespread. The rate of increase in the CPI from the fourth quarter of 1979 to the fourth quarter of 1980 was assumed to be 10.6 percent, rather than the 9.6 percent shown in Table 1. The rate of increase from the fourth quarter of 1980 to the fourth quarter of 1981 was assumed to be unchanged from the 9.3 percent in Table 1.

case the effect on federal spending and revenues would be greater.

In summary, changes in the economy-especially in real economic growth and in the unemployment rate-can have dramatic effects on the budget totals, depending on their timing and character. More unemployment, leading to lower revenues and higher outlays, can significantly increase the deficit. Higher inflation results in more revenues and greater outlays; the revenue effect tends to reduce the deficit, while the outlay effect increases the deficit. On balance, higher inflation would lead to a smaller deficit.

TABLE 6. POTENTIAL CHANGES IN 1981 CURRENT LAW REVENUES, OUTLAYS, AND THE DEFICIT CAUSED BY CHANGES IN THE ECONOMY: IN BILLIONS OF DOLLARS

Change in Revenues	Change in Outlays	Change in Deficit
-20 to -22	+5 to +7	-25 to -29
+5 to +7	+1 to +2	+3 to +6
0 to +2	+1 to +3	+1 to -3
	-20 to -22 +5 to +7	Revenues Outlays  -20 to -22 +5 to +7  +5 to +7 +1 to +2

a/ A one percentage point lower unemployment rate would reduce revenues by slightly more than \$7 billion. Revenues could be increased by much less than \$20 billion if the lower unemployment rate is associated with declining labor productivity rather than greater real economic growth.

# THE OUTLOOK FOR THE BUDGET DEFICIT

If current laws are continued with no discretionary adjustments for the effects of inflation, the budget deficit estimates for 1980 and 1981 are \$44 billion and \$21 billion, respectively. As demonstrated in the previous section, these estimates are subject to considerable uncertainty because of possible changes in the economic outlook. The uncertainties in the current law revenue and expenditure estimates, stemming from the economy, spending rates, income tax withholding rates, and possible administrative actions, result in a \$10 billion range for 1980 and a \$20 billion range for 1981 (see Table 7).

TABLE 7. THE CURRENT LAW BUDGET DEFICIT: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1979 Actual	1980 Estimate	1981 Estimate
Deficit	-27.7	-44	-21
Range of Uncertainty		<u>+</u> 5	<u>+</u> 10

The outlook for 1982-1985 is even more uncertain. If the revenues and outlays shown in the current law projection were actually achieved, the economic growth path assumed for this period would probably not be attainable. The rapid rise in revenues and the real decline in outlays would impose a drag on the economy that would make the assumed economic growth of 3.8 percent a year very unlikely. For this reason, the budget margin (that is, the difference between current law revenues and outlays in 1982-1985) should not be construed as a projection of budget surpluses. Unless the strength of nonfederal demand were to exceed all historical precedent, some or all of the budget margin would have to be used for fiscal policy changes--tax cuts or spending increases--in 1982-1985 if the assumed growth path is to be achieved.

The magnitude of fiscal policy changes in 1982-1985 would be governed by several factors. The autonomous strength of nonfederal demand would play the major role in determining the need for short-term fiscal stimulus. Other things being equal, stronger nonfederal demand (that is, faster growth in consumption, investment, state and local government purchases, and net exports) reduces the need for tax cuts or spending increases to maintain high employment. Monetary policy could also affect the size of the projected deficit. Assuming a fixed target for economic growth, an expansionary monetary policy would diminish the need for fiscal policy adjustments. The composition of the fiscal stimulus itself could alter the size of the projected deficit, since federal purchases of goods are

generally thought to have a larger and more immediate economic impact per budget dollar than transfer payment programs.

The 1982-1985 budget deficits and surpluses are based on assumptions about the strength of nonfederal demand growth that are more optimistic than the historical averages would suggest. Under these assumptions, the budget would be balanced starting in 1983. 8/ The most significant aspect of the projection of deficits and surpluses shown in Table 8 is the ranges. In fiscal year 1982, for example, the budget deficit could be as high as \$40 billion, or the budget could be near balance. Estimating uncertainty is one factor in the range. Two other important sources of uncertainty exist, however. First, if policymakers maintain a fixed target for economic growth and use fiscal policy to achieve the target, variations in the strength of nonfederal demand can lead to wide swings in the fiscal policy changes required and the resulting deficits. Second, if the strength of nonfederal demand is significantly different than assumed in this report, policymakers may choose not to use fiscal policy to achieve a fixed economic growth target. They may either alter their targets or attempt to use means other than fiscal policy to stimulate growth.

TABLE 8. THE PROJECTED BUDGET DEFICIT (-) OR SURPLUS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1982	1983	1984	1985
Deficit (-) or Surplus	-20			5
Range of Uncertainty	<u>+</u> 20	<u>+</u> 30	<u>+</u> 40	<u>+</u> 50

<sup>8/</sup> The projection was obtained by assuming tax cuts and spending changes from current law totalling \$50 billion in fiscal year 1982. By 1985, the fiscal policy changes would accumulate to almost \$300 billion.

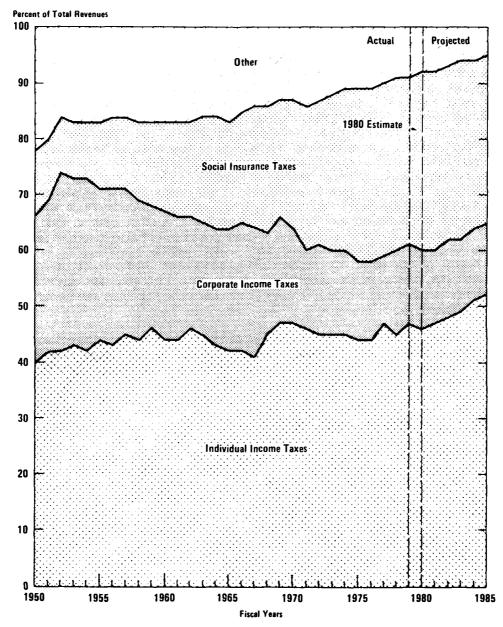
Federal revenues in fiscal year 1979 were an unusually high percentage of gross national product. They exceeded 20 percent of GNP for only the third time since World War II. The other two occasions, 1969 and 1970, followed passage of an income tax increase. Unless a tax cut is enacted in the near future, revenues will grow to 20.6 percent of GNP in 1980 and 21.0 percent of GNP in 1981. Under legislation now in force, revenues would grow to unprecedented levels by the end of the 1980-1985 period. The progressive income tax and the scheduled increases in Social Security payroll taxes would in combination significantly increase the tax burden on the average wage earner. Individual income taxes would rise to over 14 percent of taxable personal income in 1981 and almost 18 percent in 1985--the highest levels in history. The Social Security tax rate is scheduled to rise from the current 6.13 percent to 6.65 percent in 1981 and to 7.05 percent in 1985. Corporate income taxes would also increase faster than GNP in 1981-1985 because of higher profits resulting from the decontrol of domestic oil prices. (This projection of revenues does not include the effects of the pending windfall profits tax legislation, since final Congressional action on the bill was not completed in the first session of the 96th Congress.)

This chapter provides further details on the revenue projections in Chapter I. It examines the major sources of projected revenue growth in an historical perspective, with estimates of the effects of changes in inflation and unemployment on revenues.

## FEDERAL REVENUES--PAST AND FUTURE

The degree to which the federal government relies on various sources of revenue has shifted markedly since 1950 (see Figure 1). Individual income taxes have provided roughly between 40 and 47 percent of total federal revenues over the past 30 years. The share of revenues accounted for by social insurance taxes (primarily for Social Security and unemployment insurance) has increased from 11.1 percent in 1950 to 30.4 percent in 1979, because of increases in both the tax rates and the taxable earnings bases. Corporate income taxes as a revenue source have declined significantly, from 26.5 percent in 1950 to 14.1 percent in 1979. This shift has resulted from several factors, including changes in the investment tax credit, accelerated depreciation, reductions in the corporate income tax rate, and a decrease in corporate profits as a percent of GNP.

Figure 1. The Composition of Federal Revenues, Fiscal Years 1950-1985



If current tax laws were to remain unchanged through 1985, individual income taxes would rise more rapidly than social insurance taxes or corporate income taxes (see Table 9). Their relative shares would change somewhat, with individual income taxes accounting for over 50 percent of federal revenues by 1985.

TABLE 9. CURRENT LAW PROJECTIONS OF REVENUES BY SOURCE: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1980 Estimate	Projections					
		1981	1982	1983	1984	1985	
Individual Income Taxes	238	275	323	386	461	549	
Corporate Income Taxes	73	77	94	102	119	135	
Social Insurance Taxes	162	186	214	243	272	312	
Excise Taxes	19	19	18	19	19	19	
Estate and Gift Taxes	6	6	7	8	8	9	
Customs Duties	8	9	10	12	14	16	
Miscellaneous Revenues	11	11	12	12	12	12	
Total	516	582	678	<del>78</del> 1	905	1,053	
Percent of Projected GNP	20.6	21.0	21.8	22.3	23.0	23.9	

#### Individual Income Taxes

The disproportionate rise in individual income tax receipts in the 1980-1985 period stems largely from the interaction of inflation and the progressive tax structure. Without a legislated tax cut, real after-tax income would decrease over the next five years for taxpayers whose salaries change at the same rate as the general price level, moving them into higher tax brackets. The revenue attributable only to this disproportionate response of the progressive tax structure to inflation is estimated to be \$10 billion in 1981, and would grow to \$118 billion by 1985 (see Table 10).

TABLE 10. INDIVIDUAL INCOME TAX REVENUES UNDER CURRENT LAW AND WITH DISCRETIONARY INFLATION OFFSET: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1981	1982	1983	1984	1985
Current Law Revenues Percent of GNP	<b>275</b> 9.9	<b>323</b> 10.4	<b>386</b>	<b>461</b>	<b>549</b> 12.5
Revenues with Inflation Offset a/ Percent of GNP	<b>265</b> 9.6	<b>299</b> 9.6	337 9.6	<b>381</b> 9.7	431 9.8

a/ The inflation offset removes only the extra revenues resulting solely from the effects of inflation; the additional revenue from real growth in incomes remains. Consequently, taxes as a percent of GNP rise slightly.

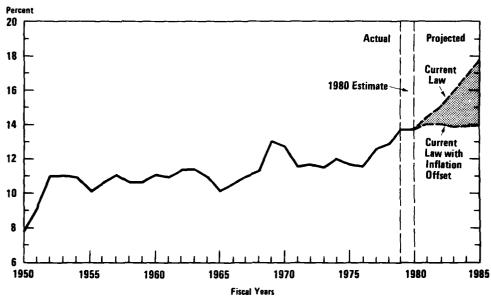
In the past, the Congress has enacted income tax cuts that have, in fact, offset the effects of inflation on the progressive tax structure, as well as stimulated economic growth. Reductions were made in calendar years 1964, 1969, 1971, 1975, 1976, 1977, and 1978. Without a tax cut, the increase in revenues would improve the chances for reducing the budget deficit in fiscal year 1981. By 1982, however, the increased tax burden under current law would reach an unprecedented level, constituting a significant fiscal drag on the economy if spending were held to current levels.

A more realistic baseline for revenues may be a revenue projection that includes a discretionary inflation offset, as discussed in Chapter I. That projection includes tax cuts sufficient to counteract the disproportionate response of the individual income tax to inflation. Using that baseline, revenues from individual income taxes would grow from 9.4 percent of GNP in 1979 to 9.8 percent in 1985, as opposed to 12.5 percent in 1985 under current law.

Even if individual income taxes were adjusted to offset the effects of inflation, however, the projected revenues would still represent a larger percentage of personal income in 1985 than in 1979 because of real growth in personal incomes. This real growth, which pushes taxpayers into higher tax

brackets just as inflation does, would increase individual income taxes as a percent of taxable personal income from 13.7 percent in 1980 to 14.0 percent in 1985 (see Figure 2). The change in the average tax burden caused by the interaction of real economic growth and the progressive tax structure is negative in 1980 because of the forecasted recession. If the economy grows in 1981-1985 as assumed, however, tax burdens would increase.

Figure 2. Individual Income Taxes as a Percent of Taxable Personal Income, Fiscal Years 1950-1985



## Social Insurance Receipts

Over 80 percent of social insurance receipts result from Social Security payroll taxes. The 1972 and 1977 amendments to the Social Security Act established a schedule for increases both in the wage base on which these taxes are computed and in the tax rates. Under the economic assumptions presented in Chapter I, the wage base would increase from \$17,700 in 1978 to \$44,100 by 1985. As noted earlier, the tax rates for both employers and employees are to rise from 6.13 percent in 1979 to

7.05 percent in 1985. Consequently, social insurance revenues would increase rapidly during the projection period, from 6.1 percent of GNP in fiscal year 1979 to 7.1 percent in 1985.

The first increases legislated by the 1977 amendments went into effect on January 1, 1979. The annual payroll tax of the average employee increased by less than \$15. For some employees, however, the tax increased by as much as \$260. The additional revenues resulting from the 1977 amendments are estimated at \$8.5 billion in fiscal year 1980 and \$16.1 billion in 1981, growing to \$43.6 billion by fiscal year 1985.

## Oil Price Decontrol and the Corporate Income Tax

Under normal circumstances, corporate income taxes might be expected to increase at about the same rate as GNP. The decontrol of domestic oil prices, however, will lead to higher corporate profits. The current law projection therefore includes \$10 billion additional revenues in 1981 and \$18 billion by 1985 to account for the decontrol of domestic oil prices. Corporate income tax revenues will thus rise slightly faster than if oil price controls had continued. By 1985, corporate income tax revenues will constitute 3.1 percent of GNP.

Enactment of the windfall profits tax would, however, reduce the projected growth in corporate profits since the windfall tax, as an excise tax, would be a cost of doing business. As a result, the windfall tax would reduce corporate income tax receipts compared to current law.

# EFFECT OF CHANGES IN INFLATION OR UNEMPLOYMENT ON PROJECTED REVENUES

An increase in the inflation rate raises tax receipts by increasing the nominal incomes on which taxes are levied. The timing and size of the revenue impact can vary, however, depending on the origin of the price change and how it works its way through the economy.

If an increase in the CPI is reflected promptly in an across-the-board increase in all incomes and profits, the effects are relatively straightforward. A one-percentage-point increase of this kind in the CPI in calendar year 1980 would increase fiscal year 1980 revenues by about \$4 billion. The full-year effect would show up in fiscal year 1981, when revenues would be increased by about \$6 billion (see Table 11).

Higher prices may not be reflected promptly in higher taxable incomes, however. If an increase in inflation is caused by higher world oil

TABLE 11. THE EFFECT ON PROJECTED REVENUES OF A CHANGE IN ECONOMIC ASSUMPTIONS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1980	1981	1982
One Percentage Point Higher Inflation Rate a/	+4	+6	+11
One Percentage Point Higher Unemployment Rate $\underline{b}/$	-10	-21	-26

a/ Assuming a proportional increase in all prices and incomes.

prices, for example, much of the resulting higher income will be received, at least initially, by those who do not pay U.S. taxes.

Even if the higher prices do result in higher taxable U.S. incomes, the revenue that is raised will depend on, among other things, who receives the income and what tax rate they pay. If the higher incomes are received initially by wage earners with relatively low tax rates, less revenue will be raised than if they show up in corporate profits that are taxed at higher rates.

Increases in the unemployment rate are generally accompanied by a reduction in projected revenues. Tax receipts depend most directly on nominal incomes. Higher unemployment is associated with lower nominal incomes in several ways. First, a rise in the unemployment rate is usually the result of a decline in real economic activity. The lower real output and incomes lead to layoffs and a rise in the unemployment rate. In addition, the lower incomes of the unemployed ripple throughout the economy. Consumers spend less, business profits are reduced, and wage increases for those who remain employed may be smaller. Finally, slackening economic activity may, with some lag, reduce the upward pressure on prices. Under these circumstances, lower prices can generally be translated into lower nominal incomes. The precise effect of higher unemployment on revenues depends on how this process works and how long it takes.

b/ The revenue gain from a one percentage point lower unemployment rate would be much smaller than \$10 billion in 1981 and \$26 billion by 1982 if the lower unemployment rate were caused by lagging productivity rather than by greater-than-expected real economic growth.

In the long run, a 1 percent higher unemployment rate is associated with about a 3 percent lower real GNP. 1/ Nominal GNP and incomes may be somewhat more than 3 percent lower because of the downward pressure on prices. (If the decline in real GNP in calendar year 1980 is greater than in the CBO forecast, the unemployment rate would likely be higher. Unless the rate of real economic growth in 1981 exceeded the CBO forecast of 2.9 percent, the level of real GNP would remain below the CBO forecast. The unemployment rate would also remain higher than in the forecast.) The reduction in revenues because of lower incomes would be \$10 billion in fiscal year 1980, and would grow to \$21 billion in fiscal year 1981—the first full fiscal year in which the level of real GNP is lower.

A 1 percent lower unemployment rate in calendar year 1980 could result in a revenue gain of approximately \$10 billion in fiscal year 1980 and \$21 billion in fiscal year 1981 if the recession forecast for 1980 is less severe than anticipated or does not take place at all. During the past year, most forecasters overestimated the unemployment rate. The major reason for the forecasting errors, however, appears to be real decline in labor productivity, with more workers being employed to produce a given level of output. The effect on estimated revenues of a 1 percent lower unemployment rate in calendar year 1980, caused by slow growth or a decline in labor productivity, could be relatively small since nominal incomes might not be significantly different from the CBO forecast.

<sup>1/</sup> A more precise statement of the relationship is that the change in the unemployment rate (in percentage points) between any two periods should be equal to one-third of the difference between the change in potential GNP and the change in actual GNP.

Federal outlays in 1980 are expected to grow by more than \$66 billion over actual spending in 1979. The rate of growth--over 13.5 percent--is large compared to the past. It is the result of double-digit inflation and a projected rise in the unemployment rate--both of which automatically trigger spending increases.

This chapter analyzes in detail past and future trends in federal outlays for benefit payments for individuals, national defense, grants to state and local governments (other than for benefit payments), net interest, and various other federal operations. Three different projections of future outlays are made. The first projection assumes that the provisions of current legislation are continued and that no change is made in programs now on the books. On this assumption, the rates of increase in federal spending in 1981-1985 would drop below past averages because, under current law, less than half of the budget is indexed to inflation. A more realistic projection can be obtained by assuming that all federal programs are indexed to inflation, since in practice most programs such as national defense and grants to state and local governments tend to be adjusted by the Congress on a discretionary basis to keep up with rising costs (see Table 12). For national defense spending, a third projection is presented that takes into consideration the current defense force structure and investment plan as modified by the Congress. Finally, the chapter discusses what would happen to the projected outlays if inflation, unemployment, or interest rates were to be higher than forecast by CBO for calendar year 1980.

TABLE 12. FIVE-YEAR PROJECTIONS OF OUTLAYS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1981	1982	1983	1984	1985
Current Law Outlays	603	648	685	722	763
Discretionary Inflation Increment	16	38	62	85	112
Outlays with Inflation Increment	619	686	747	807	875

## CURRENT LAW SPENDING PROJECTIONS

The base for the current law spending projections is Congressional action as of the end of the first session of the 96th Congress, plus anticipated supplemental appropriations for entitlement programs such as Medicaid and for the 7 percent 1980 federal pay raise that went into effect on October 1, 1979. The base also includes a supplemental for the food stamp program, on the assumption that the Congress will lift the authorization ceiling. It does not include other discretionary program supplementals and legislative savings that have been proposed by the President or anticipated in the second budget resolution for 1980.

The projections for 1981-1985 are primarily based on costs under the extension of current laws. Some of the key assumptions follow:

- o Some federal programs—such as Social Security, Medicare, unemployment insurance, and interest on the public debt—are open—ended under current law; that is, their costs are determined primarily by population changes or economic factors. These programs are not reviewed annually by the Congress through the appropriations process. Other programs—like Medicaid, public assistance, and veterans' pensions—are open—ended in the same sense, even though funds are appropriated annually. The projections made here for open—ended programs are based on economic assumptions and anticipated population changes. 1/
- o The costs of a few federal programs are specified under current law for 1981 and beyond. There are also statutory ceilings for some programs, such as social services grants. The effects of these provisions are included in the current law projections.
- o Although statutory authority for most discretionary federal programs will expire during the five-year period, authorizations are assumed to be routinely renewed except for programs that are clearly of a one-time nature, such as temporary study commissions. The general revenue sharing program is assumed to be renewed in 1981.
- o The current law projection assumes no discretionary inflation adjustments to the programs in the 1980 base. Over 40 percent of spending, however, is already indexed to inflation under current

Although food stamps is technically no longer an entitlement program, it has been included as an open-ended program in the current law projections.

law. Therefore, the projection includes cost-of-living adjustments for Social Security benefits and other indexed programs.

The projection does not allow for future federal pay increases, even though annual adjustments are frequent. In three of the last five years, the federal pay increase has been capped—that is, held below the level needed to maintain comparability with salaries in the private sector. Because of the frequency of pay caps, inflation adjustments for federal pay resemble the discretionary increases for annually appropriated programs more than the automatic increases for programs like Social Security. In this paper, therefore, pay is not considered to be automatically indexed. 2/

Between fiscal years 1950 and 1979, federal budget outlays grew from \$42.6 billion to \$493.7 billion (see Figure 3). In real terms, federal spending has tripled over the past 30 years. Under current laws, federal outlays would grow another \$269 billion in 1980-1985--an increase of 55 percent in current dollars. In real terms, however, outlays on a current law basis would decline over the period by about 5 percent.

The largest source of current law spending increases would be benefit payments for individuals (see Table 13). By fiscal year 1985, the share of the federal budget for these payments would be 62 percent, compared to 48 percent in 1979. 3/ Under a continuation of current laws, all other categories of spending would decline in real terms in 1981-1985.

### Benefit Payments for Individuals

Led by Social Security, benefit payments for individuals have demonstrated a consistent upward trend in both real and nominal terms since 1950 (see Figure 4). Major milestones in the growth include the beginning of disability insurance payments in 1958, the advent of Medicare in 1966, program expansions in food stamps and supplemental security income (SSI) in the early 1970s, and the surge in unemployment insurance benefits in 1976 caused by the 1975 recession. Over 85 percent of the projected growth in total current law spending for 1980-1985 occurs in benefit payments for individuals. Social Security, which constitutes one-fourth of the total

This approach to federal pay increases represents a departure from previous CBO five-year projections reports.

<sup>3/</sup> For a breakdown of the federal spending projections by the 19 budget functions used for Congressional budget resolutions, see Appendix A.

Figure 3. Federal Outlays, Fiscal Years 1950-1985

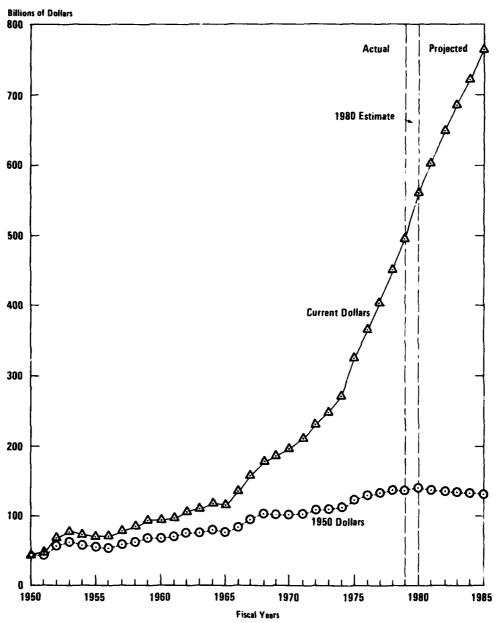


Figure 4.
Outlays for Benefit Payments for Individuals, Fiscal Years 1950-1985

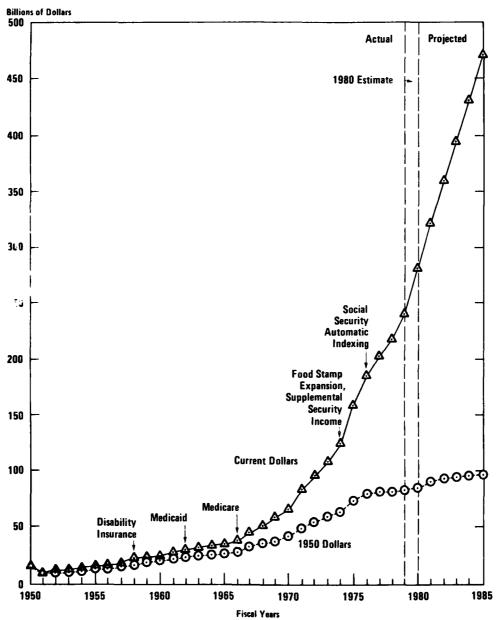


TABLE 13. PROJECTED CHANGES IN CURRENT LAW OUTLAYS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

		Year-	to-Ye	ear Ch	anges	;	Change
	1980	1981	1982	1983	1984	1985	Change 1980-1985
Benefit Payments for Individuals	41	42	38	36	36	41	233
National Defense	12	5	2	1			19
Other Grants to State and Local Governments <u>a</u> /	1			1			4
Net Interest	8	2	3	1			14
Other Federal Operations	4	-6	2	-1			-1
Total Change	67	43	45	38	37	41	269
Total Outlays	560	603	648	685	722	763	

Some grants to state and local governments are for benefit payments, such as public assistance and Medicaid. These grants are classified here as benefit payments to individuals. The other grants category covers grants to state and local governments for purposes other than benefit payments for individuals.

federal budget, dominates the projected increases on a dollar basis (see Table 14). On a percentage basis, however, the increases for Medicare and Medicaid would be largest, averaging 14.7 percent annually compared to 13.1 percent for Social Security. If no changes are made in current laws, real growth in benefit payments would be modest compared to the past (2.6 percent per year compared to the 30-year average of 7.2 percent). Most of the projected real growth results from population and demographic changes.

TABLE 14. PROJECTED CHANGES IN FEDERAL BENEFIT PAYMENTS UNDER CURRENT LAW: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

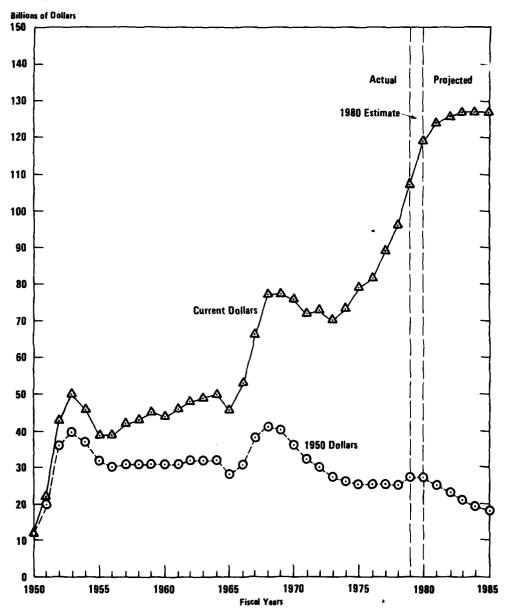
		Year-	Year-to-Year Changes					
	1980	1981	1982	1983	1984	1985	Change 1980-1985	
Social Security	16	20	20	21	20	21	117	
Unemployment Compensation	5	7	1	-2	-2		10	
Medicare/Medicaid	6	7	8	9	10	12	53	
Military and Civil Service Retirement	4	4	4	4	4	4	24	
Public Assistance and Related Activities	7	4	4	3	3	4	25	
Other	3	-1	1	1			4	
Total Change	41	42	38	36	36	41	233	

### National Defense

The 30-year history of real outlays in national defense contains major swings of growth and decline (see Figure 5). 4/ After the Korean War, real defense spending remained relatively constant until a major increase in 1967 caused by the Vietnam War. In 1976, following the Vietnam War, real spending declined to the lowest point since before 1952. Over the past three years, however, real defense outlays have been increasing. Under current law, defense outlays would decline in real terms in 1981-1985 because they would not be automatically adjusted for inflation. Their apparent growth in 1981-1983 is the result of the spendout of budget authority increases approved in 1980 and prior years.

<sup>4/</sup> This category is defined as the national defense budget function (050) less military retired pay.

Figure 5.
Outlays for National Defense, Fiscal Years 1950-1985



NOTE: Excludes military retirement benefit payments.

## Grants to State and Local Governments

On a percentage basis, the largest growth in federal outlays has occurred in grants to state and local governments (other than for benefit payments). Programs in this category include general revenue sharing, the Comprehensive Employment and Training Act (CETA), grants for the construction of wastewater treatment plants, and grants for highway construction. In 1950, outlays were less than \$1 billion for this category; by 1979, the federal program of aid exceeded \$50 billion. Despite their rapid growth, these grants to state and local governments are still a relatively small part of the federal budget. During the projection period 1980-1985, this category of spending would decline in real terms under current law, since the programs are not indexed to inflation.

### Net Interest

Spending for net interest includes interest paid by the government on publicly-held securities. Outlays for this category will rise significantly in 1980 as a result of high interest rates. In 1981-1985, however, the growth in outlays is expected to be more modest because of a decline in interest rates and in the deficit. In real terms, net interest cost was lower in 1979 than in 1950, reflecting the decline of the public debt in real terms over the past 30 years. Under current law, this trend would continue.

# Other Federal Operations

The other federal operations category includes the remainder of the budget. The major components are farm price supports, domestic energy programs, foreign aid, and the numerous civilian agency salary and expense accounts that fund the day-to-day operations of the federal government. Spending in 1980 is estimated to grow by over \$4 billion, largely because of financial transactions involving the foreign military sales trust fund and revolving funds administered by the Farmers Home Administration and the Federal Housing Administration. A \$6 billion decrease is projected for 1981, primarily because of smaller farm price support payments as the effects of the grain embargo diminish and because of an anticipated sale of assets by the Farmers Home Administration. In real terms, this category has grown by about 0.3 percent annually over the past 30 years. Under current law, real spending would decline, since the programs in this category are not indexed to inflation.

# The Cost of Automatic Inflation Adjustments

In 1950, very little of the federal budget was indexed to inflation. As inflation accelerated in the late 1960s and in the 1970s, however, benefits under programs such as Social Security and civil service retirement were tied to changes in the cost of living. Many of the new federal benefit payment programs begun in this period were indexed from inception. At present, about 43 percent of total outlays and 87 percent of the outlays for benefit payments are tied to inflation; current laws would have to be changed to prevent these inflation adjustments from occurring.

The cost of automatic inflation adjustments (using January 1, 1980, as the starting date) is projected at about \$8 billion in 1980. The costs will accumulate in 1981-1985 as further adjustments go into effect, so that by 1985 automatic cost-of-living increases will have raised the level of federal spending by about \$138 billion (see Table 15). 5/

### **DISCRETIONARY INFLATION ADJUSTMENTS**

A large part of the \$450 billion growth in federal outlays since 1950 has been in response to inflation. As prices have risen, appropriations and benefit formulas have been modified to maintain the purchasing power of federal spending. Some inflation adjustments have been made through the annual appropriations process, as agencies have requested and received increases to counteract the effects of inflation. Some benefits in the earlier years were adjusted by ad hoc legislation but, more recently, most benefit payment programs have been indexed so that inflation adjustments have not required revisions in the laws.

National defense and many nondefense programs have not been indexed to inflation. Any realistic projection of their costs in coming years

Some evidence shows that real growth in spending for benefit payments has been lower since the enactment of automatic indexing provisions. One reason is that, before automatic indexing, legislation that provided inflation adjustments also included program expansions and liberalizations. It may be, however, that such expansions would not take place in the current political environment. A further discussion of this subject is contained in Congressional Budget Office, Indexed Federal Benefit Programs and Inflation (forthcoming). An analysis of indexed programs is also contained in U.S. General Accounting Office, An Analysis of the Effects of Indexing for Inflation on Federal Expenditures, Report to the Congress of the United States (August 15, 1979).

TABLE 15. PROJECTED COSTS OF AUTOMATIC INFLATION ADJUST-MENTS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1980	1981	1982	1983	1984	1985
Social Security and Related Programs	4	20	35	51	66	84
Federal Employee Retirement	1	3	6	9	12	15
Medicare/Medicaid	2	6	9	14	19	24
Unemployment Compensation	1	2	3	4	5	6
Other		3	5	7	8	9
Total	8	34	<del></del> 58	<del></del> 85	110	138

must recognize, however, that outlays will probably be increased to reflect higher price levels. The cost of such adjustments is estimated at \$16 billion in 1981, and would grow to \$112 billion by 1985 (see Table 16). The estimate makes three basic assumptions:

- o The projection for benefit payments for individuals would be almost identical to the current law projection already given. The major benefit programs that are not indexed are veterans' compensation, veterans' medical care, and GI bill benefits.
- o National defense outlays would remain constant in real terms. In current dollars, discretionary inflation adjustments would add \$8 billion to defense spending in 1981 and \$58 billion by 1985.
- o Grants to state and local governments and other federal operations would remain essentially constant in real terms. No new programs would be included in the projection, but spending on existing programs would be maintained in terms of current purchasing power.

### THE DEFENSE BASELINE PROJECTION

The current law projections for national defense contain no specific programmatic assumptions. The projections extrapolate into future years

TABLE 16. PROJECTED COSTS OF DISCRETIONARY INFLATION ADJUSTMENTS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1981	1982	1983	1984	1985
Federal Pay Increases					
Defense	4	9	13	17	22
Nondefense Page 1985	2	4	6	8	10
		_			
Subtotal	6	13	19	25	32
Defense (nonpay)	4	10	17	26	36
Nondefense (nonpay)	6	16	26	34	45
Total	. 16	38	62	<del></del> 85	112

the same level of resources—that is, budget authority—provided in 1980 appropriations. A disadvantage of using current law projections as a starting point for the consideration of multiyear budget options is that there is no way to disentangle the costs of major programs that might or might not be included in the projection.

Recently, CBO has developed an alternative approach to defense projections that may be somewhat more useful as a starting point for consideration of defense budget options. This new approach, called the defense baseline, is a budget projection based on current and anticipated force levels and on investment plans in the President's 1980 budget proposal as modified by appropriations and authorization action in the first session of the 96th Congress. The costs of all the major programs included in the projection and further details on the methodology are shown in Appendix B.

The defense baseline is not a forecast of future budgets. Rather, it represents the current status of Congressional modifications of the defense plan presented in the President's 1980 budget. Further modifications to the plan by both the President and the Congress can be expected in the future. For example, the 1981 budget plan represents changes proposed by the President. The 1981 budget plan and various options that will be discussed during the next several months can be compared to the defense baseline

projection on the basis of budget cost, force levels, and manpower requirements.

The projection differs from the Department of Defense plan included in the 1980 budget in two ways. First, it reflects modifications made to the plan in appropriations action during the first session of the 96th Congress. Second, the modified plan has been costed under CBO assumptions about future inflation and the spendout of budget authority.

The defense baseline does not significantly affect total outlays in 1980, adding only about \$0.1 billion in 1981 to the projection of current law outlays with the discretionary inflation increment included. By fiscal year 1985, the defense baseline adds \$8 billion to the budget totals over and above the funding needed to maintain constant purchasing power (see Table 17). A major reason for this increase is the scheduled phase-in of the MX missile.

TABLE 17. COMPARISON OF ALTERNATIVE PROJECTIONS OF FEDERAL SPENDING: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1981	1982	1983	1984	1985
Current Law Outlays	603	648	685	722	763
Discretionary Inflation Increment	16	38	62	85	112
Outlays with Inflation Increment	619	686	747	807	875
Added Cost of Defense Baseline		i	3	5	8
CBO Baseline	619	687	<del>75</del> 0	812	883

### EFFECTS OF INFLATION, UNEMPLOYMENT, AND INTEREST RATES

As noted in Chapter I, higher inflation, unemployment, and interest rates would increase the outlay estimates given here. The precise effects would depend on the timing and characteristics of the changes.

If the unemployment rate were to be one percentage point higher throughout calendar years 1980-1982 because of lower economic growth in calendar year 1980, federal outlays could be expected to be \$4 billion higher in 1980 and over \$5 billion higher in 1981 and 1982. The major source of the increase would be unemployment compensation, as shown in Table 18. Higher unemployment rates increase spending estimates for this program because of a rise in the number of beneficiaries and an increase in the average benefit (as workers with higher wage histories become unemployed). 6/ Additional unemployment would also increase participation in the food stamp program and would, with some lag, increase the number of workers who apply for disability insurance benefits. 7/ The increase in outlays with higher unemployment is somewhat mitigated by the lower inflation that would eventually follow a more severe economic slowdown. By fiscal year 1983, outlays for Old Age and Survivors' Insurance, Medicare, and federal employee retirement would be over \$1 billion lower than projected under the CBO forecast.

A 1 percent increase in the inflation rate forecast for calendar year 1980 would have little effect on 1980 outlays. The lagged indexing provisions for most benefit payment programs would delay the spending effects until 1981 and 1982, when they would be \$1.4 billion and \$2.4 billion, respectively. In Social Security, for example, the higher inflation would significantly affect only one quarter of fiscal year 1981 and would have the greatest effect on the cost-of-living increase for July 1981.

Some of the effects of higher inflation are not automatic, but would only occur if discretionary programs were adjusted to offset the effects of inflation. Outlays for national defense would be higher by \$0.3 billion in 1981 and \$0.9 billion in 1982. In total, a 1 percent higher inflation rate in

<sup>6/</sup> The change in unemployment compensation outlays caused by a change in the unemployment rate is not symmetrical. That is, a 1 percent lower unemployment rate could be expected to reduce total outlays by more than \$4 billion in 1980 and more than \$6 billion in 1981. Under the CBO forecast, the extended benefits program, which provides an additional 13 weeks of benefits for unemployed workers when the unemployment rate is between 7.5 and 8.5 percent, would be in effect in most states in fiscal year 1980 and in all states in 1981. If the unemployment rate were one percentage point higher, the program would remain in effect. If the unemployment rate were one percentage point lower, however, many states would not provide the additional 13 weeks of coverage.

<sup>7/</sup> Congressional Budget Office, An Econometric Model of Social Security Outlays, Technical Analysis Paper (forthcoming).

TABLE 18. THE EFFECT ON PROJECTED OUTLAYS OF CHANGES IN ECONOMIC ASSUMPTIONS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1980	1981	1982
One Percentage Point Higher in Calendar Years		ent Rate	
Unemployment Compensation a/ Disability Insurance Food Stamps Other Total	3.2 0.1 0.3 0.2 	4.1 0.3 0.6 0.6 5.6	4.0 0.5 0.6 0.3 
One Percentage Point Hig in Calendar Year		Rate	
Indexed Benefit Programs Social Security and Related Programs Federal Employee Retirement Medicare/Medicaid Other	0.1  0.1	0.5 0.2 0.3 0.3	1.3 0.3 0.4 0.4
Subtotal	0.2	1.4	2.4
Discretionary Programs		0.4	1.8
Total	0.2	1.8	4.2
One Percentage Point High in Calendar Year		 Rates	
91-Day Treasury Bills All Government Interest Rates	0.5 1.0	1.0	0.3 1.1

a/ If the unemployment rate were one percentage point lower in calendar years 1980-1982, outlays for unemployment compensation could be expected to be more than \$4 billion lower than projected for fiscal year 1980, and over \$6 billion lower for fiscal year 1981.

1980 would raise the spending projection by \$0.4 billion in 1981 and \$1.8 billion in 1982.

Higher interest rates affect interest on the public debt. The effects can vary, depending on whether only short-term rates are assumed to be higher or the rates for the entire array of government financing instruments (bills, notes, and bonds) are assumed to be affected. If interest rates were one percentage point higher in calendar year 1980, net interest payments would increase by \$0.5 to \$1.0 billion in fiscal year 1980. The effect is not particularly 'arge, since a significant part of the fiscal year 1980 financing has already taken place. For the remainder of the financing, the higher rates would be paid for only part of the year. The increase in outlays would be somewhat higher in 1981 because of the full-year costs of some of the securities issued in 1980. By 1982, however, the government would have refinanced many of the 1980 issues and the budget effects of the higher 1980 rates would diminish.

**APPENDIXES** 

#### APPENDIX A. PROJECTIONS OF FEDERAL SPENDING BY FUNCTION

In this report, federal spending has been treated by operational categories such as national defense, benefit payments to individuals, grants to state and local governments, and other federal operations. Another important classification of federal spending is by the major budget functions, regardless of the methods used to carry out the activities. The Congressional Budget Act of 1974 requires the Congress to include estimates of budget authority and outlays for each function in its annual budget resolutions.

The relationship between the spending categories used in this report and the functional classification is as follows:

- o The national defense category is the same for both classifications--except defense retired pay, which has been classified as a benefit payment in this report.
- o The bulk of the benefit payments to individuals are found in functions 550, 600, and 700.
- o Grants to state and local governments (other than grants for payments to individuals) are concentrated largely in functions 300, 400, 450, 500, and 850.

Tables A-1 and A-2 contain current law projections of budget authority and outlays by function, while Tables A-3 and A-4 contain budget projections that include discretionary inflation adjustments.

TABLE A-1. CURRENT LAW BUDGET AUTHORITY PROJECTIONS: BY FUNCTION AND BY FISCAL YEAR, IN BILLIONS OF DOLLARS

Dungstion	1980		Pr	ojectio	ns	
Function	Estimate	1981	1982	1983	1984	1985
National Defense (050)	140.6	142	144	145	147	148
International Affairs (150)	14.0	14	14	13	14	14
General Science, Space, and Technology (250)	5.8	6	6	6	6	6
Energy (270)	39.4	4	5	4	4	6
Natural Resources and Environment (300)	12.2	13	12	12	12	13
Agriculture (350)	5.0	5	3	3	3	4
Commerce and Housing Credit (370)	8.3	6	6	6	6	6
Transportation (400)	19.6	22	20	20	20	20
Community and Regional Development (450)	8.0	10	9	10	10	10
Education, Training, Employ- ment, and Social Services (500	o) <sup>29.9</sup>	32	32	32	32	33
Health (550)	59.9	71	82	92	103	116
Income Security (600)	219.4	243	268	293	317	354
Veterans' Benefits and Services (700)	20.9	21	21	21	21	22
Administration of Justice (750)	4.3	4	4	4	4	4
General Government (800)	4.3	4	4	4	4	4
General Purpose Fiscal Assistance (850)	8.3	9	9	9	9	9
Interest (900)	62.3	65	70	72	75	77
Allowances (920)	0.8					
Undistributed Offsetting Receipts (950)	-22.0	-24	-26	-28	-33	-35
Total	640.9	645	683	720	755	810

TABLE A-2. CURRENT LAW OUTLAY PROJECTIONS: BY FUNCTION AND BY FISCAL YEAR, IN BILLIONS OF DOLLARS

P.m.s.	1980		F	Projecti	ions	
Function	Estimate	1981	1982	1983	1984	1985
National Defense (050)	130.9	137	141	143	145	147
International Affairs (150)	9.9	9	9	9	9	9
General Science, Space, and Technology (250)	5.7	6	6	6	6	6
Energy (270)	6.1	7	7	6	8	8
Natural Resources and Environment (300)	12.6	13	13	12	12	12
Agriculture (350)	6.6	2	3	4	4	4
Commerce and Housing Credit (370)	4.9	1	3	3	2	2
Transportation (400)	18.7	20	20	21	21	21
Community and Regional Development (450)	8.7	10	10	10	10	10
Education, Training, Employ- ment, and Social Services (50	30.7	31	32	32	32	33
Health (550)	57.0	65	73	83	93	105
Income Security (600)	190.1	224	251	276	299	327
Veterans' Benefits and Services (700)	20.3	21	21	21	21	22
Administration of Justice (750)		5	4	4	4	4
General Government (800)	4.2	4	4	4	4	4
General Purpose Fiscal Assistance (850)	8.3	9	9	9	9	9
Interest (900)	62.3	65	70	72	75	77
Allowances (920)	0.8					
Undistributed Offsetting Receipts (950)	-22.0	-24	-26	-28	-33	-35
Total	560.2	603	648	685	722	763

TABLE A-3. BUDGET AUTHORITY PROJECTIONS WITH DISCRETIONARY INFLATION INCREMENT: BY FUNCTION AND BY FISCAL YEAR, IN BILLIONS OF DOLLARS

Function	1980		Pr	ojectio	ns	
Function	Estimate	1981	1982	1983	1984	1985
National Defense (050)	140.6	155	170	185	202	219
International Affairs (150)	14.0	15	16	17	19	21
General Science, Space, and Technology (250)	5.8	6	7	7	8	9
Energy (270)	39.4	4	6	6	6	5
Natural Resources and Environment (300)	12.2	13	14	15	16	18
Agriculture (350)	5.0	5	4	4	4	4
Commerce and Housing Credit (370)	8.3	6	6	6	6	7
Transportation (400)	19.6	22	22	24	25	27
Community and Regional Development (450)	8.0	11	11	12	13	14
Education, Training, Employ- ment, and Social Services (500	) <sup>29.9</sup>	34	37	40	43	46
Health (550)	59.9	72	83	94	106	121
Income Security (600)	219.4	246	276	306	334	376
Veterans' Benefits and Services (700)	20.9	22	24	26	28	30
Administration of Justice (750)	4.3	5	5	5	6	6
General Government (800)	4.3	5	5	5	6	6
General Purpose Fiscal Assistance (850)	8.3	9	10	11	12	13
Interest (900)	62.3	65	70	72	75	77
Allowances (920)	0.8	2	2	2	2	2
Undistributed Offsetting Receipts (950)	-22.0	-24	-27	-30	-35	-38
Total	640.9	673	741	809	878	964

TABLE A-4. OUTLAY PROJECTIONS WITH DISCRETIONARY INFLATION INCREMENT: BY FUNCTION AND BY FISCAL YEAR, IN BILLIONS OF DOLLARS

E	1980		F	Projecti	ons	
Function	Estimate	1981	1982	1983	1984	1985
National Defense (050)	130.9	145	160	174	190	205
International Affairs (150)	9.9	10	10	11	12	13
General Science, Space, and Technology (250)	5.7	6	7	7	8	9
Energy (270)	6.1	7	7	7	7	7
Natural Resources and Environment (300)	12.6	13	14	15	16	17
Agriculture (350)	6.6	2	3	4	4	5
Commerce and Housing Credit (370)	4.9	1	3	3	3	2
Transportation (400)	18.7	20	22	23	24	25
Community and Regional Development (450)	8.7	10	10	11	11	12
Education, Training, Employ- ment, and Social Services (50	00) <sup>30.7</sup>	32	35	38	41	44
Health (550)	57.0	65	74	85	96	109
Income Security (600)	190.1	224	252	277	302	330
Veterans' Benefits and Services (700)	20.3	22	24	26	28	30
Administration of Justice (750)	4.5	5	5	5	6	6
General Government (800)	4.2	5	5	5	6	6
General Purpose Fiscal Assistance (850)	8.3	9	10	11	12	13
Interest (900)	62.3	65	70	72	75	77
Allowances (920)	0.8	2	2	2	2	2
Undistributed Offsetting Receipts (950)	-22.0	-24	-27	-30	-35	-38
Total	560.2	619	686	747	807	875

#### APPENDIX B. THE DEFENSE BASELINE PROGRAM

The defense baseline is a five-year projection of an explicit defense force structure and investment program consistent with the Administration's 1980 program but reflecting Congressional guidance and action on the 1980 budget. The force structure and investment programs are those approved in the 1980 budget.

The outyear force structure reflects announced force level changes, the introduction of new weapon systems purchased in the current and prior years, and the planned deactivation of obsolete or worn-out systems. The outyear investment programs represent the Administration's 1980 program adjusted to reflect the outyear effects of 1980 Congressional appropriation decisions.

The baseline is costed in 1980 dollars, assuming the same per unit level of force activity in the outyears as approved in the 1980 budget. The costing also assumes the same level of efficiency over the six-year period. The outyear costs in 1980 dollars are inflated using the latest CBO economic assumptions.

In the past, CBO national defense projections have held all programs at current levels in either current dollars (current law) or constant dollars (current law with discretionary inflation adjustments). That method does not take program content into consideration; for example, a projection of the 1980 Shipbuilding and Conversion, Navy (SCN) account would project funding associated with a nuclear aircraft carrier in each year, even though purchase of a new carrier is not currently contemplated. It also ignores the large backlog of undelivered ships that will require added resources for operations when delivered in the outyears. The defense baseline corrects these deficiencies by recognizing that the defense budget is driven by an underlying program reflected in force levels and investment plans over a five-year period.

The defense baseline is not a forecast of future forces and budgets. Rather, it is a budget projection based on current and anticipated force levels and on investment plans as reflected in fiscal year 1980 appropriations and authorizations. It may be advantageous to use the defense baseline as a starting point for multiyear planning, since the budgetary effects of explicitly adding or deleting programs from the projection can be estimated. In contrast, the current law projection for defense contains no specific programmatic assumptions and therefore there is no way to

disentangle the costs of major programs that might or might not be included in the projection. This dilemma is avoided in the defense baseline approach by building the projection according to specific program content. Reductions made to the baseline projection are the result of reductions in the constituent programs; additions are the result of enhancements to specific programs or the inclusion of new programs.

Table B-1 shows the aggregate results of the projections under both methods, and the differences between them.

TABLE B-1. COMPARISON OF THE NATIONAL DEFENSE BUDGET PROJECTIONS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1980	1981	1982	1983	1984	1985
Constant Real Inputs						
Budget authority	140.6	154.7	169.6	185.1	201.6	219.3
Outlays	130.9	145.4	159.6	174.2	189.7	205.5
Defense Baseline Program						
Budget authority	140.6	156.5	172.0	189.8	211.7	225.4
Outlays	130.9	145.5	161.2	177.3	194.9	213.3
Difference						
Budget authority		1.8	2.4	4.7	10.1	6.1
Outlays		0.1	1.6	3.1	5.2	7.8

The baseline program contains, on an annual basis, an average of I percent real growth in defense budget authority. Over the five-year period, real growth in outlays is smaller because of the lag between appropriations and outlays for procurement programs.

# FORCE LEVELS

Force levels change during the projection period because weapon systems currently on order will be delivered and some systems now in operation will be phased out. For example, the 10 Polaris submarines are projected to be deactivated in fiscal year 1981, and the first Trident submarine is expected to be operational in the same year. Thus, the 1981 projection for nuclear-powered ballistic missile submarines (SSBN) reflects the net of added Trident costs offset by reduced Polaris costs. Table B-2 depicts the projected retirements, projected deliveries, and force levels for SSBNs in 1981-1985.

TABLE B-2. COMPUTATION OF NUCLEAR-POWERED BALLISTIC MISSILE SUBMARINE (SSBN) FORCE LEVELS: BY FISCAL YEAR, IN NUMBERS OF SHIPS

	1981	1982	1983	1984	1985
SSBN Force Level at Start of Year	41	32	34	35	37
Projected Polaris Retirements	-10				
Projected Trident Deliveries	1	2	1	2	1
SSBN Force Level at End of Year	32	34	35	37	38

Table B-3 depicts the overall force levels used in making the funding projections. As in the SSBN example, these force levels are the net result of the introduction of new systems and the phasing out of the obsolete. The projections assume that, on a per unit basis, these forces will be operated at 1980 levels and that no new efficiencies or inefficiencies will arise during the projection period.

The force-level analysis is straightforward: once a weapon system is procured, it is delivered and becomes operational according to a predictable schedule. Similarly, retirements are a function of the obsolescence or age of the weapon system. Critical to the analysis is the age of current forces and the backlog of undelivered items.

## **INVESTMENT PROFILE**

The investment profile is based primarily on the five-year procurement program contained in the budget justification materials for fiscal year

TABLE B-3. MAJOR ACTIVE FORCE LEVELS USED IN THE DEFENSE BASELINE PROJECTIONS: BY FISCAL YEAR, IN UNITS OF EQUIPMENT

	1980	1981	1982	1983	1984	1985
Strategic Forces						
Titan	54	54	54	54	54	54
Minuteman	1,000	1,000	1,000	1,000	1,000	1,000
SSBN	41	32	34	35	37	38
B-52	316	316	316	316	316	316
FB-111	60	60	60	60	60	60
Tactical/Mobility Forces						
Land forces		۸.		٠.		<b>.</b> .
Army divisions	24	24	24	24	24	24
Marine Corps divisions	4	4	4	4	4	4
Air Force Tac Air						
A-10	186	264	360	360	360	360
F-4	798	648	456	360	240	120
F-15	348	396	432	432	432	432
F-16	72	168	316	456	600	720
F-111	246	240	240	240	240	240
Navy Tac Air						
Aircraft carriers	13	12	13	13	13	13
A-7	288	288	288	288	288	288
F-4	120	801	96	60	24	
F-14	168	180	192	204	216	216
F-18				24	48	72
Marine Corp Tac Air						
AV-8	45	45	45	45	45	45
F-4	84	84	84	84	60	<b>3</b> 6
F-18					24	48
Naval forces						
Attack submarines	80	85	89	94	98	97
Destroyers	79	80	78	80	84	80
Frigates	70	78	88	95	105	108
Cruisers	27	27	27	27	27	27

1980 and modified by the 1980 defense appropriation bill. The President's budget request for 1980 was supported by detailed estimates of the five-year investment costs of proposed weapon systems to be acquired. The baseline projections are based on the President's 1980 program as changed to reflect the outyear effects of 1980 Congressional action. 1/ In some cases, the change is substantial; for example, although the President's program included \$4.6 billion for the Trident II missile over the projection period, the baseline includes no direct funding for the missile because the Congressional appropriations denied all direct Trident II missile funding. Conversely, the baseline includes all of the Administration's planned outyear funding for the MX strategic missile because the appropriations bill did not differ from the Air Force program. Table B-4 shows the budget authority included in the projections for major investment programs.

The baseline reflects the movement of weapon systems from research and development through graduated production levels. Consequently, the projection may result in a more useful starting point for the consideration of funding alternatives for defense investment. This fact is illustrated by comparing the Shipbuilding and Conversion, Navy account projections for 1981 based on 1979 and 1980 funding levels. At the time CBO projected the 1979 budget, the shipbuilding account included funding for neither a Trident submarine nor an aircraft carrier. As a result, the projection for 1981 ignored two major programs or implied a severe suppression of most other programs. The 1980 budget as approved, however, includes funding for both a Trident submarine and a nuclear aircraft carrier; under a projection of the 1980 budget that holds resources (that is, budget authority) constant in real terms, the 1981 shipbuilding projection overstates the shipbuilding program. Thus, in a major investment area in which the Congress is particularly interested, the constant real input method produces a \$2 billion, or 30 percent, difference in the projection of one year.

## OTHER PROGRAMS

Some programs in the 1980 base reflect a desired level of effort that is not affected by force changes or major investment decisions. Examples include minor military construction and basic research, which are projected to be constant in real terms. Other parts of the base, such as the intelligence and atomic energy defense activities, have a very specific program content, but unless the variation in these programs was obtainable in unclassified form they were projected to be constant in real terms.

<sup>1/</sup> The projections are not based on the President's program recently submitted in the 1981 budget, since the Congress has not yet had the opportunity to modify that program through appropriations and authorization action.

TABLE B-4. MAJOR INVESTMENT PROGRAMS CONTAINED IN THE NATIONAL DEFENSE BUDGET PROJECTIONS: BY FISCAL YEAR, IN BILLIONS OF DOLLARS

	1980	1981	1982	1983	1984	1985
Strategic Forces						
MX	0.9	1.7	2.3	4.3	9.2	10.8
Trident I missile	8.0	0.8	0.7	0.7	0.7	0.8
Trident submarine	1.5	1.4	2.0	1.8	3.9	0.1
B-52 mods	0.7	0.7	0.8	0.8		0.7
Air-launched cruise missile	0.5	0.5	0.5			0.5
Cruise missile carrier		0.1	0.1	0.3	1.2	1.3
Tactical/Mobility Forces						
Land forces						
AAH	0.2	0.4	0.5	0.6	0.6	0.6
UH-60	0.4	0.4	0.4	0.4	0.5	0.5
XM-1 tanks	0.8	1.2	1.4	1.5	1.5	1.7
IFV/CFV	0.3	0.5	0.5 1.7	-		0.5 2.0
Missiles	0.9	1.4	1./	2.0	1.9	2.0
Air Force Tac Air						
A-10	0.9	0.6				
F-15	1.0	1.1	0.6			
F-16	1.7	1.9	1.9	1.9	2.0	2.0
ATCA	0.2	0.3	0.4	0.2		
E-3A (AWACS)	0.4	0.3	0.2	0.2		
Navy Tac Air						
CV-SLEP		0.5		0.5		0.6
F-14	0.5	0.5	0.6	0.6		
F-18	0.8	1.1	1.5	1.5	2.2	2.2
Marine Corps Tac Air		•				
F-18	0.2	0.4	0.5			0.8
AV-8B	0.2	0.3	0.6	0.6	1.0	1.1
Naval forces						
SSN-688	0.8	0.5	0.6	0.6	0.6	0.6
DDG-2 SLEP		0.6	0.5	0.6		
AEGIS destroyer	8.0	1.6	1.7	2.8	2.0	2.2
DDX		1 5			0.7	0.6
FFG	1.3	1.5	1.7	1.4	1.1	0.1
Mine counter measure ships		0.2		0.2	0.2	